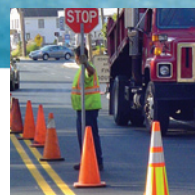
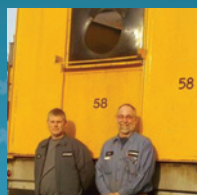


# Connecticut Technology Transfer

Winter 2011



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## A Report on Police Fatigue and Highway Safety

By Murray J. Pendleton, Chief of Police  
Waterford, Connecticut  
Chairman, CPCA Highway Safety Committee

At the June 17<sup>th</sup>, 2010 IACP Highway Safety Committee Workshop Meeting in Branson, Missouri, Bryan Vila, Ph.D., Director of Simulated Hazardous Operational Tasks Lab, Washington State University, Sleep and Performance Research Center presented a power point presentation entitled Police Fatigue and Highway Safety, with the initial focus on tired police officers. Dr. Vila informed our work group that studies are clearly indicating that 51% of Americans say they have driven while drowsy during the past year. And that drowsy driving cause 100,000 crashes a year resulting in 1,500 fatalities. It would be a fair statement to say that police officers have a tendency to sleep less and drive drowsy more often than we realize.

If fact, a survey of 2,566 officers in the United States and Canada has revealed that 91% reported being fatigued routinely, 85% reported driving while drowsy, while 39% reported falling asleep at the wheel. The survey has revealed that 75% of the officers said more officer education is needed on how to recognize and avoid drowsy driving.



*Police Fatigue continued on page 2*



*Seasons Greetings*

*From Your Friends at the Technology Transfer Center!*





*Photos courtesy of CT Department of Transportation.*

It is becoming all too common today to read about crashes caused by drowsy drivers. From Santa Clara County Sheriff's Department to the State of New York, law enforcement officers often find themselves the victim of a crash related to drowsy driving and in far too many cases, they are the drowsy driver.

Fatigue reduces safety, health, and performance by decreasing attentiveness, impairing physical and cognitive functions, and affecting one's attitude. In addition fatigue may interfere with one's ability to form sound judgments. There are several key causes to police fatigue which individually may not be critical however as they accumulate, the risk factors quickly increase. Shift work, long hours due to overtime assignments, often accompanied by moonlighting and inadequate sleep intensify the risk of a crash.

We are learning that sleep disorders affect more police officers than previously realized. We must continue to research the affect of the follow issues:

- **How to measure fatigue for police officers on shift work;**
- **Which shift length is safer and when;**
- **Ideal changing time of shift;**
- **Distraction in police vehicle.**

Managing fatigue is by no means easy, but by developing good sleep hygiene, obtaining medical help for suspected sleep disorders including apnea; managing caffeine wisely, and finally, use rest breaks and/or naps to boost alertness, the risk of drowsy driving can be reduced.

It is clearly time to consider methods to educate officers, supervisors, and

managers in fatigue counter measures. Building fatigue safety into procedures, policies and protocols is a positive start. Officers who work double shifts while moonlighting place themselves in jeopardy as much as a snow plow operator who has worked all day and plows all night.

Recent studies comparing fatigue to alcohol impairment has resulted in some interesting findings;

- A) Being awake 17 – 19 hours has the same effect as having a bac of .05%;**
- B) Being awake for 24 hours straight has the same effect as having a bac of .10%.**

This thumbnail sketch of information is a sample of what was provided by Dr. Bryan Vila, in his power point presentation, along with a few of my own personal comments. Listening to this presentation in person was a valuable experience that leads me to believe that there is more of a relationship between drowsy driving and distracted driving then previously thought. Tired police officer issues and their affect on highway safety is clearly a concern for Connecticut Police Chiefs today.

*For additional important information, please refer to "Tired Cop Publications" entitled*

- 1. Sleep Deprivation: What Does It Mean for Public Safety Officers (2009);**
- 2. The Effects of Officer Fatigue on the Exercise of Police Discretion and on accountability (2009);**
- 3. Police Long Work Hours: Causes, Consequences and Alternatives (2008)**

# Connecticut Technology Transfer

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# Making A Cumbersome Job More Efficient

By Jesse Leavenworth, [leavenworth@courant.com](mailto:leavenworth@courant.com)  
The Hartford Courant  
6:11 PM EST, November 23, 2010

MANCHESTER—

With no direction or orders from above, fleet maintenance supervisor Chris Holt and mechanic Joel Karnolt fabricated a steel cap that fits snugly in the bed of a 20-ton dump truck. Compared with the smaller

**"They did it on their own," General Manager Scott Shanley told the board of directors at a morning meeting in town hall. "I just think it's really great."**

leaf collection containers the town has used, the new device boosts leaf-hauling capacity from 16 to 24 cubic yards, improving the overall efficiency of the curbside collection now underway, town officials said Tuesday.

"They did it on their own," General Manager Scott Shanley told the board of directors at a morning meeting in town hall. "I just think it's really great."

Standing outside the Center Street fire station with one of two trucks fitted with the new cap, Karnolt said the motivation was simply to "make something that's inherently inefficient more efficient."

The town could have purchased similar steel accessories for about \$6,000 each, but Holt and Karnolt said they made them for about \$2,500 each. Town truck driver Fran Kinckman said the new collection bed,

which includes a swinging rear gate, not only hauls more, but is easier to operate than the smaller boxes.

The increased capacity means less travel time back and forth to the composting section of the town landfill and also less fuel use, Public Works Director Mark Carlino said.

The new leaf collectors have worked so well that the town probably will add more next fall, Carlino said.

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American Traffic Safety Services Association (ATSSA)

## T2 Center Hosts the first Connecticut Roadway Safety Poster Contest

The Connecticut Technology Transfer Center at the University of Connecticut is very pleased to host the first Connecticut Roadway Safety poster contest for grades K-6.

Each year, approximately 720 people lose their lives in work zone accidents—most of them drivers. Students are encouraged to take time to recognize the reasons work is undertaken, the type of jobs performed by roadway workers, and the families, loved ones, community responsibilities and other roles performed by these men and women, who have some of the most dangerous jobs in America.

### POSTERS WILL BE JUDGED IN THREE CATEGORIES:

*Grades K-1, Grades 2-4, Grades 5-6*

A winner in each category will win a basket of Safety Goodies including Bike Helmets.

The posters will be displayed at the Connecticut DOT Work Zone Safety Press Conference held in the spring. The members of the Connecticut Highway Work Zone Safety Council will be the judges. Connecticut winners will be submitted for consideration in the National American Traffic Safety Services Association (ATSSA) Poster Contest.

To be eligible for the contest, all posters must be postmarked by January 28, 2011. More information is posted on our website at: [www.t2center.uconn.edu](http://www.t2center.uconn.edu)

# Sign Retroreflectivity Management Tools Available

Creating a plan for managing sign retroreflectivity in your jurisdiction can get extremely complicated. Which of the assessment or management methods described by the FHWA is right for your agency? How can you be sure the method you choose is appropriate for all areas in your jurisdiction? What if you don't have an inventory of signs yet? How much will all this cost?

Two tools from the Center for Technology & Training at the Michigan Tech Transportation Institute can help. The Sign

Retro Management Selection Tool and the Sign Inventory Cost Estimator Tool provide an easy way to answer all of these questions and more. Used together, the tools will help you evaluate multiple combinations of assessment or management methods, and then develop a strategy that best meets the needs of your agency. The tools will help you determine the direction you should go and they will provide you an estimate for how much it will cost to get there.

To get access to the tools, click the link below: [ctt.mtu.edu/ToolRegistration.html](http://ctt.mtu.edu/ToolRegistration.html)



# Congratulations 2010 T2 Center Graduates

More than 100 graduates, guests and award winners joined us on October 28<sup>th</sup> at the 2010 Technology Transfer Center Graduation and Award Ceremony to recognize the achievements of this year's graduates and the 2010 Creative Solutions Award Winners. Graduates from the Road Master, Road Scholar, Legal Traffic Authority and Public Works Academy Program were in attendance. It was a wonderful ceremony enjoyed by all.

Keynote speakers from the Federal Highway Administration, CT Department of Transportation and the CT Transportation Institute focused their congratulatory messages on the commitment required to maintain the state's road system and the dedication to excellence illustrated by the graduates' commitment to professional development. They commended the professionals for understanding the need for innovation and

efficiency in today's fiscal climate and spoke to the need to maintain the legacy of our transportation system.

This year's graduates join more than 500 other state and local transportation professionals in having completed one or more of the T2 Center's programs. We would like to congratulate all the graduates for their hard work and dedication.



## ◀ ROAD MASTER

Joseph Baker	CT Dept. of Transportation
Charles Berger	Town of Watertown
Michael Boucher	Town of New Milford
John Caldwell	Town of South Windsor
Francis L. Colwell	CT Dept. of Transportation
Brian P. Cull, II	CT Dept. of Transportation
Joseph Curioso, III	Town of Groton
James Docktor	Town of Brookfield
Alan Ference	CT Dept. of Transportation
Heather Frost	CT Dept. of Transportation
Bill Gelormino	Town of Goshen
Troy Grenier	City of New Britain Public Works
Thomas H. Hughes	City of Danbury
John Inesta	Town of Greenwich
Tim Jackson	Town of Groton
Tracy Jackson	Town of Groton
Eric Kennedy	CT Dept. of Transportation
Alan Kromish	Town of Colchester
Nathan Miceli	Town of Stonington
Norman Miller	CT Dept. of Transportation
Chris Olsen	Town of New Milford
Stanley Paszczuk	City of New Britain
Joseph Paternoster	CT Dept. of Transportation
Karl Reichle	Town of South Windsor
Stephen Rice	CT Dept. of Transportation
David M. Sarisley	Town of Andover
Ray Sikorski	Town of Colchester
James Spagnolo	Town of Brookfield
Paul Thomas	Town of Stonington
Edmund W. Thurz, Jr.	CT Dept. of Transportation
Robert Wadowski	Town of Farmington
Paul Wooten	City of New Britain



## ◀ ROAD SCHOLAR

Joseph Bragaw	Town of Stonington
Roy Chandler	Town of Woodstock
Jeremy Cooper	Town of Glastonbury
Mark Czerepuszko	Town of Manchester
Donald Dapont	City of Waterbury
David DeNoia	City of New London
Daniel DiReinzo	CT Dept. of Transportation
William Eyberse	CT Dept. of Transportation
Jeff Hanson	CT Dept. of Transportation
Douglas Harris	CT Dept. of Transportation
Timothy Hiller	CT Dept. of Transportation
Thomas H. Hughes	City of Danbury
David Moriarty	CT Dept. of Transportation
Edward Nagy	Town of Easton
William Petruno	Town of New Milford
David Sabourin	Town of Killingly
David Shinder	Town of Granby
Gordon Spink, Jr.	Town of Woodstock
Scott Zenke	Town of Farmington



## ◀ PUBLIC WORKS ACADEMY

Leo Adams	Town of Thompson
T.J. Arcari	Town of Burlington
Brian Attardo	Town of East Lyme
Joseph Aubin	Town of Westport
Douglas Bates	Town of Manchester
George Casale	Town of Colchester
Charles Corner	Town of Westport
Antonio Dinis	Town of Watertown
Mario Diurno	Town of Westport
Ruben Gonzalez, Jr.	City of Bridgeport
Dean Grasley	Town of New Milford
Timothy Hebert	Town of Woodstock
	Highway Department
Donald Hill	Town of North Stonington
Bill Hirleman	Town of Watertown
Chris Jesudowich	Town of Farmington
Leroi Jones	City of Bridgeport
Michael Merritt	Town of New Milford
Frederick Morton	Town of Granby
Brian Onze	Town of Westport
Kenneth Ouellette	Town of Burlington
Dan Ouellette	Town of Cromwell
Fred Rich	Town of Woodstock
	Highway Department
Wesley Roman	Town of East Lyme
Frank Summers	Town of East Lyme
Aaron Thayer	Town of New Milford
Armindo Videira	City of Bridgeport
Charles Zingle	Town of Colchester

*Continued on page 6*



# Congratulations 2010 T2 Center Graduates



## ◀ LEGAL TRAFFIC AUTHORITY

Donald Anderson  
Scott Boulton  
David DeNoia  
John Iennaco, P.E.  
James Martin  
William Molis  
Joe Rios  
Scott Todd  
Shawn Wathley

Darien Police Dept.  
Derby Police Department  
City of New London  
Town of Madison  
Darien Police Dept.  
Norwich Police Dept.  
Newtown Police Department  
Derby Police Department  
Town of New Milford



*Left to Right: Deputy Commissioner Albert Martin, FHWA Division Administrator, Amy Jackson-Grove and Executive Program Director of CTI, James Mahoney.*



*Left to Right: Karl Reichle, Town of South Windsor, Joseph Bragaw, Town of Stonington, Albert Martin, Amy Jackson-Grove and James Mahoney*

## ▲ GRADUATE KEYNOTE SPEAKERS

## ◀ CONNDOT, FHWA AND CTI SPEAKERS



## ◀ 2010 CREATIVE SOLUTIONS AWARD WINNERS FROM THE TOWN OF SIMSBURY, TOWN OF EAST HARTFORD AND CITY OF NEW LONDON

## What is the Connecticut Highway Work Zone Safety Advisory Council?

The Highway Work Zone Safety Advisory Council was established in 2008, under Public Act 08-114, and is made up of the commissioners of transportation, public safety, and motor vehicles, or their designees; the presidents of the Connecticut Employees Union Independent and the Connecticut State Police Union, or their designees, and a representative of the Connecticut Construction Industries Association. A representative from the Technology Transfer Center at UConn and the Connecticut FHWA Division Office also currently serve on the council. In 2009, under Public Act 09-187, The Council was given the responsibility of developing and making available a work zone safety training curriculum for law enforcement. The Council would recommend it to be used by the Division of State Police, the Police Officer Standards and Training Council and municipal police departments.



## Safe and Effective Use of Connecticut Law Enforcement Personnel in Work Zones

The course curriculum provides law enforcement personnel a working knowledge of traffic control work zones, and defines roles and responsibilities when working in work zones. The State Police, the Police Officer Standards and Training Council, and each municipal police department are encouraged to include in each basic or review police training program a session on highway work zone safety that covers, at least:

1. Enforcement of criminal laws on highway worker endangerment;
2. Techniques for handling unsafe driving incidents in a highway work zone;
3. Risks associated with unsafe driving in a highway work zone;

4. Safe traffic control practices, such as the proper location of officers and wearing high-visibility safety apparel; and
5. General guidelines, standards, and applications in the Manual on Uniform Traffic Control Devices, including training on the proper use of traffic control devices and signs and a one hour annual refresher on the guidelines, standards, and applications.



The Connecticut Transportation Institute Technology Transfer Center with the cooperation of the Highway Work Zone Safety Council and the Connecticut Department of Transportation is making the course curriculum available online. The course materials will be available in January on the T2 Center site at: [www.t2center.uconn.edu](http://www.t2center.uconn.edu)

## Towns of Windsor and Vernon Test Out Work Zone Intrusion Alarms

**We have attached our Work Zone Alarms to green cones in order for our guys to distinguish the cones with the units. Right now we are using them with a crew working on Day Hill Road, the main thoroughfare to our business district, thousands of people commute each day on the road.**

*Marty Maynard, Risk Manager - Town of Windsor/ Windsor BOE*

**Work Zone Alarms protect Vernon Public Works employees as they work on West Street repairing sidewalks.**

*Jeff Schambach - Road Foreman - Town of Vernon*







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I would like to see a future newsletter article on the topic of: \_\_\_\_\_

I would like to suggest the following future training topics be offered by the T2 Center:

\_\_\_\_\_

I would like to request the following informational resource materials:

\_\_\_\_\_

Please fax a copy of this form to (860) 486-2399 or mail to:

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